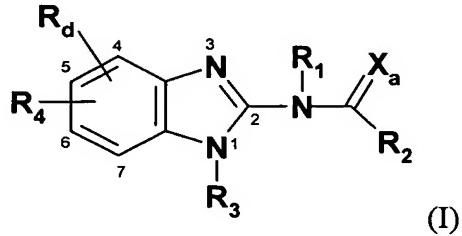


LISTING OF CLAIMS

Claim 1(currently amended):A compound of the formula (I):



wherein:

R₁ is hydrogen or alkyl;

R₂ is chosen from aryl and heteroaryl, each **R₂** is optionally substituted with one or more **R_a**;

R₃ is C₁₋₁₀ alkyl chain branched or unbranched optionally substituted with one or more **R_b**,

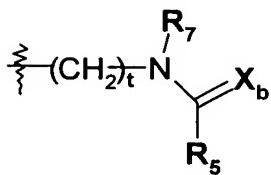
or **R₃** is the group:

-(CH₂)_n- **L-R₆**, wherein **L** is chosen from a bond, -NH-C(O)-, -O-C(O)-, -C(O)- and -S(O)_m- wherein **m** is 0, 1 or 2, and wherein said group is optionally substituted by one or more **R_b**;

wherein **R₆** is independently chosen from hydrogen, hydroxy, alkyl, alkoxy, alkylthio, arylC₀₋₅ alkyl, aryloxyC₀₋₅ alkyl, heteroarylC₀₋₅ alkyl, cycloalkylC₀₋₅ alkyl, heterocyclC₀₋₅ alkyl and amino said amino is optionally mono-or di-substituted by acyl, alkyl, alcoxycarbonyl, cycloalkylC₀₋₅ alkyl, arylC₀₋₅ alkyl, heteroarylC₀₋₅ alkyl or heterocyclC₀₋₅ alkyl;

n is 1 - 10;

R₄ is:



wherein **R₄** is covalently attached at the indicated **5-** or **6-** position of the formula (I), **t** is 0;

R₅ is chosen from arylC₀₋₅ alkyl, alkyl, heteroarylC₀₋₅ alkyl, cycloalkylC₀₋₅ alkyl and heterocyclylC₀₋₅ alkyl, each **R₅** is optionally substituted with one or more **R_c**;

R₇ is hydrogen, alkenyl or alkyl;

or **R₅** and **R₇** together with the nitrogen atom to which they are attached form:

a 4-7-membered monocyclic ring or

an 8-14-membered bicyclic ring,

wherein each monocyclic or bicyclic ring optionally contains an additional 1 to 3 heteroatoms chosen from N, O and S and each ring is aromatic or nonaromatic, and wherein each monocyclic or bicyclic ring is optionally substituted by one or more **R_c**;

each **R_a**, **R_b** or **R_c** are independently chosen from hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, aryl, arylalkyl, aryloxy, alkoxy, alkylthio, acyl, alkoxycarbonyl, acyloxy, acylamino, sulphonylamino, aminosulfonyl, alkylsulfonyl, carboxy, carboxamide, oxo, hydroxy, halogen, trifluoromethyl, nitro, nitrile and amino optionally mono-or-di-substituted by alkyl, acyl or alkoxycarbonyl, wherein any of the above **R_a**, **R_b** or **R_c** are optionally halogenated where possible;

R_d, covalently attached at the indicated **4-, 5-, 6- or 7-position** of the formula (I), is chosen from hydrogen, alkyl, alkoxy and halogen and

X_a and **X_b** are oxygen or sulfur;

or the pharmaceutically acceptable salts, esters, acids, isomers or tautomers thereof.

Claim 2 (currently amended): The compound according to claim 1 wherein:

R₁ is hydrogen;

R₂ is chosen from phenyl, naphthyl, and heteroaryl chosen from thienyl, furanyl, isoxazolyl, oxazolyl, thiazolyl, thiadiazolyl, tetrazolyl, pyrazolyl, pyrrolyl, imidazolyl, pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyranyl, quinoxaliny, indolyl, benzimidazolyl, benzoxazolyl, benzothiazolyl, benzothienyl, quinolinyl, quinazolinyl and indazolyl, each **R₂** is optionally substituted with one or more **R_a**;

R₃ is C₁₋₁₀ alkyl chain branched or unbranched optionally substituted with one or more **R_b**,

or **R₃** is:

-(CH₂)_n- **L-R₆**, wherein **L** is chosen from a bond, -O-C(O)-, -C(O)- and -S(O)_m- wherein **m** is 0, 1 or 2, and wherein said group is optionally substituted by one or more **R_b**;

wherein **R₆** is independently chosen from hydrogen, hydroxy, C₁₋₅ alkyl, C₁₋₅ alkoxy, C₁₋₅ alkylthio, phenyl, naphthyl, benzyl, phenethyl, heteroarylC₀₋₅ alkyl, C₃₋₇ cycloalkylC₀₋₅ alkyl, heterocyclC₀₋₅ alkyl and amino said amino is optionally mono-or di-substituted by C₁₋₅ acyl, C₁₋₅ alkyl, C₁₋₅ alkoxy carbonyl, arylC₀₋₅ alkyl, heteroarylC₀₋₅ alkyl or heterocyclC₀₋₅ alkyl; and wherein each recited heteroaryl in this paragraph is chosen from thienyl, furanyl, isoxazolyl, oxazolyl, thiazolyl, thiadiazolyl, tetrazolyl, pyrazolyl, pyrrolyl, imidazolyl, pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl and pyranyl and wherein each recited heterocycl in this paragraph is chosen from pyrrolidinyl, morpholinyl, thiomorpholinyl, dioxalanyl, piperidinyl and piperazinyl;

R₅ is chosen from phenyl, naphthyl, benzyl, phenethyl, C₁₋₅ alkyl and heteroarylC₀₋₅ alkyl wherein the heteroaryl is chosen from thienyl, furanyl, isoxazolyl, oxazolyl, thiazolyl, thiadiazolyl, tetrazolyl, pyrazolyl, pyrrolyl, imidazolyl, pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl and pyranyl, C₃₋₇ cycloalkylC₀₋₅ alkyl and heterocyclC₀₋₅ alkyl, wherein the

heterocyclyl is chosen from aziridinyl, pyrrolidinyl, morpholinyl, thiomorpholinyl, tetrahydrofuranyl, dioxalanyl, piperidinyl and piperazinyl, each **R₅** is optionally substituted with one or more **R_c**;

each **R_a**, **R_b** or **R_c** are independently chosen from hydrogen, C₁₋₅ alkyl, C₂₋₅ alkenyl, C₂₋₅ alkynyl, C₃₋₈ cycloalkyl, phenyl, benzyl, phenoxy, C₁₋₅ alkoxy, C₁₋₅ alkylthio, C₁₋₅ acyl, C₁₋₅ alkoxycarbonyl, C₁₋₅ acyloxy, C₁₋₅ acylamino, C₁₋₅ sulphonylamino, aminosulfonyl, C₁₋₅ alkylsulfonyl, carboxy, carboxamide, oxo, hydroxy, halogen, trifluoromethyl, nitro, nitrile and amino optionally mono-or-di-substituted by C₁₋₅ alkyl, C₁₋₅ acyl or C₁₋₅ alkoxycarbonyl, wherein any of the above **R_a**, **R_b** or **R_c** are optionally halogenated where possible;

R_d is chosen from hydrogen, C₁₋₃ alkyl, C₁₋₃ alkoxy and halogen;

R₇ is hydrogen, C₃₋₁₀ alkenyl or C₁₋₅ alkyl;

and

X_a is oxygen.

Claim 3 (currently amended): The compound according to claim 2 wherein:

R₂ is chosen from phenyl, naphthyl and heteroaryl chosen from thienyl, furanyl, isoxazolyl, oxazolyl, imidazolyl, thiadiazolyl, pyrazolyl, pyridinyl, quinoxalinyl and benzothienyl, each **R₂** is optionally substituted with one or more **R_a**;

R₆ is independently chosen from hydroxy, C₁₋₅ alkyl, C₁₋₅ alkoxy, phenyl, benzyl, phenethyl, heteroarylC₀₋₅ alkyl, heterocyclylC₀₋₅ alkyl, C₃₋₇ cycloalkyl and amino said amino is optionally mono-or di-substituted by C₁₋₅ acyl, C₁₋₅ alkyl, C₁₋₅ alkoxycarbonyl, arylC₀₋₅ alkyl or heteroarylC₀₋₅ alkyl;

and wherein each recited heteroaryl in this paragraph is chosen from thienyl, furanyl, isoxazolyl, oxazolyl, thiazolyl, thiadiazolyl, tetrazolyl, pyrazolyl, pyrrolyl and imidazolyl, each optionally substituted by **R_b**;

n is 1-6;

R₅ is chosen from phenyl, naphthyl, benzyl, phenethyl, C₁₋₅ alkyl and heteroarylC₀₋₅ alkyl wherein the heteroaryl in this paragraph is chosen from thienyl, furanyl, imidazolyl and pyridinyl, C₃₋₇ cycloalkylC₀₋₅ alkyl and heterocyclylC₀₋₅ alkyl, wherein the heterocyclyl is chosen from aziridinyl, pyrrolidinyl, tetrahydrofuranyl, tetrahydropyridinyl, morpholinyl, thiomorpholinyl, piperidinyl and piperazinyl, each **R₅** is optionally substituted with one or more **R_c**;

R₇ is hydrogen, propenyl or C₁₋₃ alkyl and

R_d is chosen from hydrogen and C₁₋₃ alkyl.

Claim 4 (currently amended): The compound according to claim 3 wherein:

R₂ is chosen from phenyl and heteroaryl chosen from thienyl, furanyl, isoxazolyl, thiadiazolyl, pyrazolyl and pyridinyl, each **R₂** is optionally substituted with one or more **R_a**;

R₃ is:

-(CH₂)_n-C(O)-**R₆** or

-(CH₂)_n- **R₆**;

wherein **R₆** is independently chosen from hydroxy, C₁₋₅ alkyl, C₁₋₅ alkoxy, phenyl, morpholinylC₀₋₅ alkyl, piperazinylC₀₋₅ alkyl, imidazolylC₀₋₅ alkyl, pyrrolidinylC₀₋₅ alkyl, pyrrolidinonylC₀₋₅ alkyl, thienylC₀₋₅ alkyl, C₃₋₇ cycloalkyl and amino said amino is optionally mono-or di-substituted by C₁₋₅ alkyl or C₁₋₅ alkoxycarbonyl;

R₅ is chosen from phenyl, furanyl, benzyl, phenethyl, C₁₋₃ alkyl and C₃₋₇ cycloalkylC₀₋₅ alkyl, each optionally substituted with one or more **R_c**;

each \mathbf{R}_a , \mathbf{R}_b or \mathbf{R}_c are independently chosen from C_{1-5} alkyl, C_{3-8} cycloalkyl, phenyl, C_{1-5} alkoxy, amino optionally mono-or-di-substituted by C_{1-5} alkyl, C_{1-5} alkoxycarbonyl, carboxamide, hydroxy, halogen, trifluoromethyl, nitro and nitrile, wherein any of the above \mathbf{R}_a , \mathbf{R}_b or \mathbf{R}_c are optionally halogenated where possible;

\mathbf{R}_7 is C_{1-3} alkyl;

and

\mathbf{R}_d is chosen from hydrogen and methyl.

Claim 5 (previously amended): The compound according to claim 4 wherein:

\mathbf{R}_2 is chosen from phenyl, thienyl, furanyl, isoxazolyl and pyridinyl, each optionally substituted with one or more \mathbf{R}_a ;

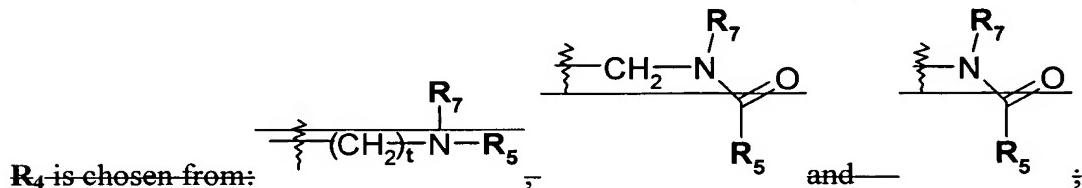
\mathbf{R}_5 is chosen from methyl, CF_3 , cyclopentyl, phenyl and cyclohexyl, each optionally substituted with one or more \mathbf{R}_c ;

\mathbf{R}_d is hydrogen and

n is 2-5.

Claim 6 (currently amended): The compound according to claim 5 wherein:

\mathbf{R}_2 is chosen from phenyl, thien-2-yl, isoxazol-5-yl and pyridin-3-yl, each optionally substituted with one or more \mathbf{R}_a ;



R₆ is independently chosen from hydroxy, methyl, ethyl, C₁₋₃ alkoxy, phenyl, morpholinyl, piperazinyl, imidazolyl, pyrrolidinyl, pyrrolidinonyl, thienylC₀₋₅ alkyl, C₃₋₇ cycloalkyl and amino said amino is optionally mono-or di-substituted by C₁₋₅ alkyl or C₁₋₅ alkoxycarbonyl;

and

each **R_a, R_b or R_c** are independently chosen from C₁₋₃ alkoxy, amino optionally mono-or di-substituted by C₁₋₃ alkyl, carboxamide, hydroxy, fluoro, chloro, bromo, trifluoromethyl, nitro and nitrile.

Claim 7 (previously amended): The compound according to one of claims 2-6 wherein:
R₄ is covalently attached at the indicated 5- position of the formula (I).

Claim 8 (previously amended): The compound according to one of claims 2-6 wherein:
R₄ is covalently attached at the indicated 6- position of the formula (I).

Claim 9 (original): A pharmaceutical composition comprising a pharmaceutically effective amount of a compound according to claim 1 and one or more pharmaceutically acceptable carriers and/or adjuvants.

Claim 10 (withdrawn): A method of treating an immunological disorder, said method comprising administering to a patient in need thereof a therapeutically effect amount of a compound according to claim 1.

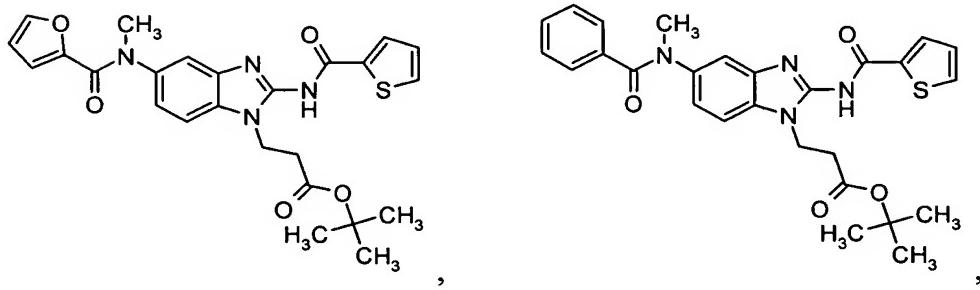
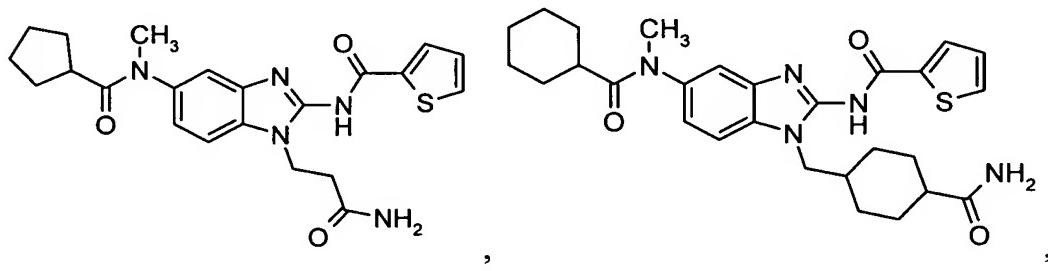
Claim 11 (withdrawn): A method of treating an inflammatory disorder, said method comprising administering to a patient in need thereof a therapeutically effect amount of a compound according to claim 1.

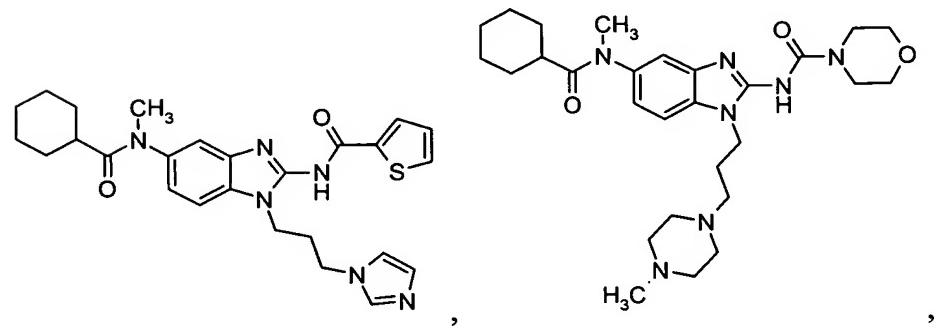
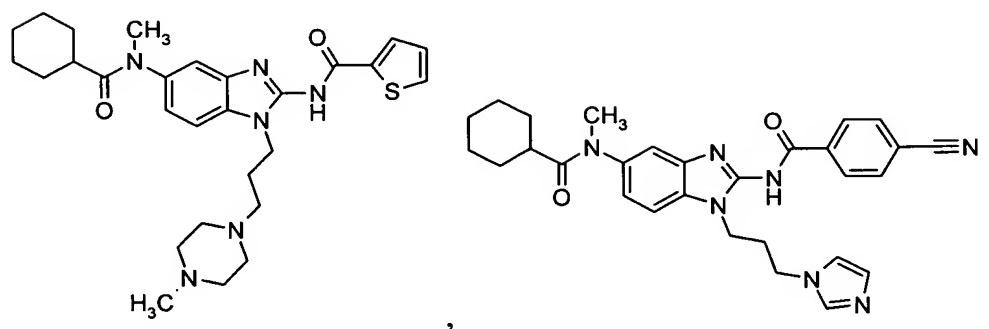
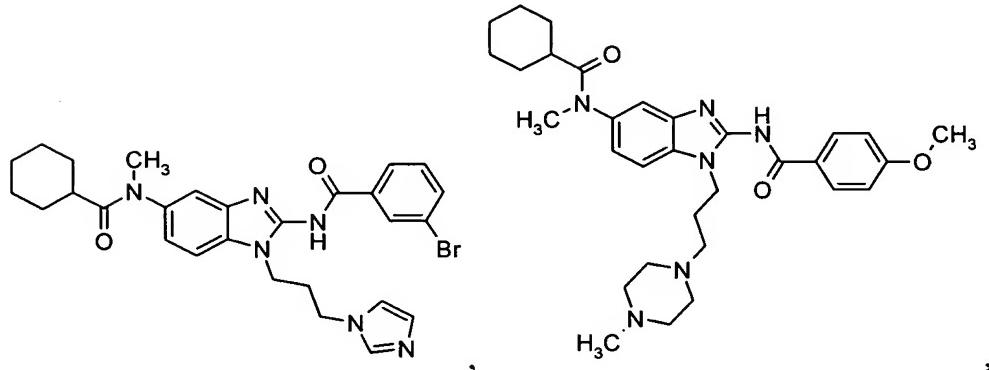
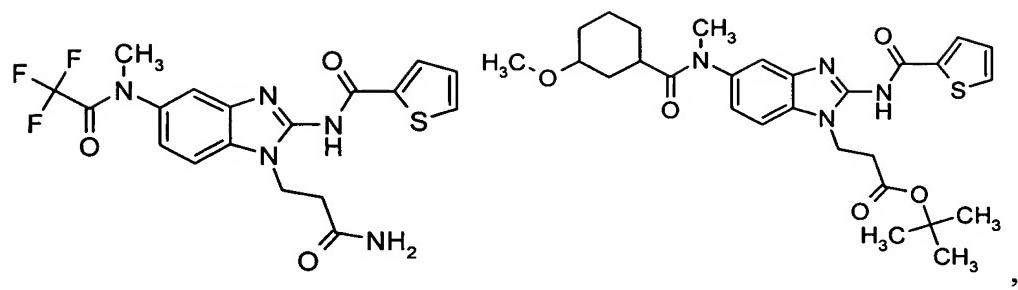
Claim 12 (withdrawn): A method of treating an allergic disorder said method comprising administering to a patient in need thereof a therapeutically effect amount of a compound according to claim 1.

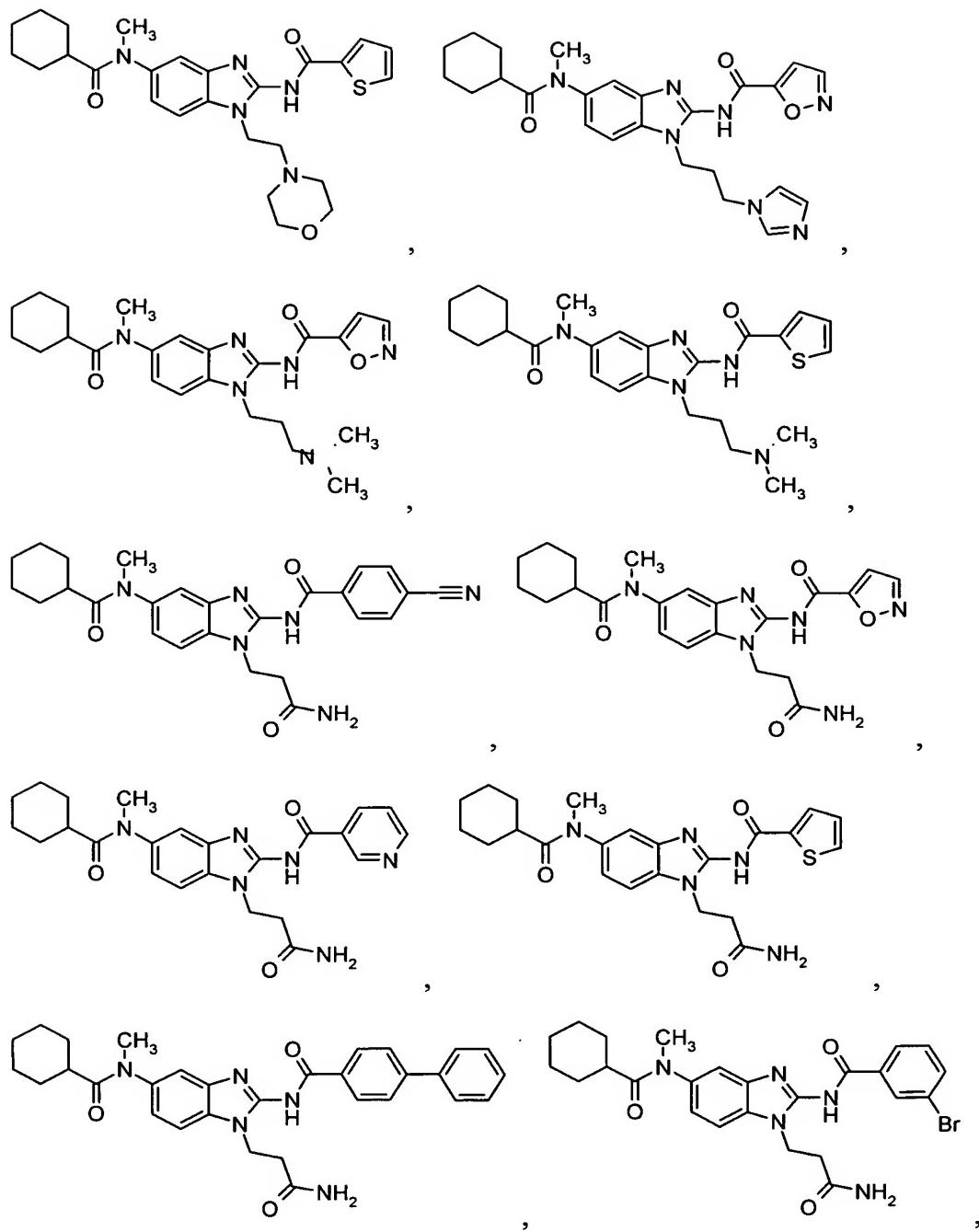
Claim 13 (withdrawn): A method of treating a disease chosen from chronic inflammation, cancer, contact dermatitis, psoriasis, rheumatoid arthritis, multiple sclerosis, type 1 diabetes, inflammatory bowel disease, Guillain-Barre syndrome, Crohn's disease, ulcerative colitis, graft versus host disease, lupus erythematosus, asthma, chronic obstructive pulmonary disease (COPD), adult respiratory distress syndrome (ARDS), bronchitis, conjunctivitis, dermatitis and allergic rhinitis said method comprising administering to a patient in need thereof a therapeutically effective amount of a compound according to claim 1.

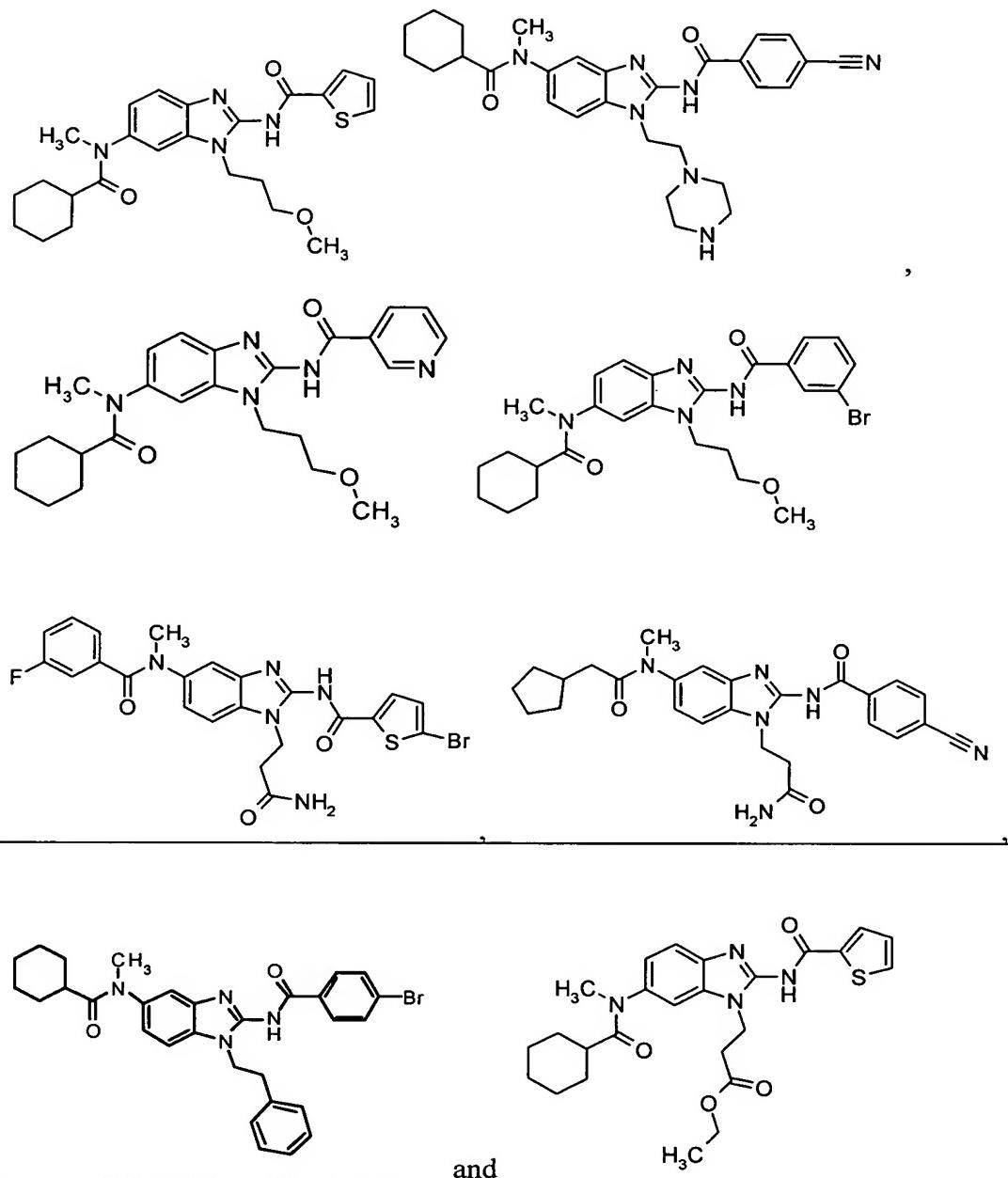
Claim 14 (withdrawn): A method administering a vaccine to an individual in need thereof comprising co-administration of a vaccine and a pharmaceutically effective amount of a compound according to claim 1.

Claim 15 (currently amended): A compound chosen from:



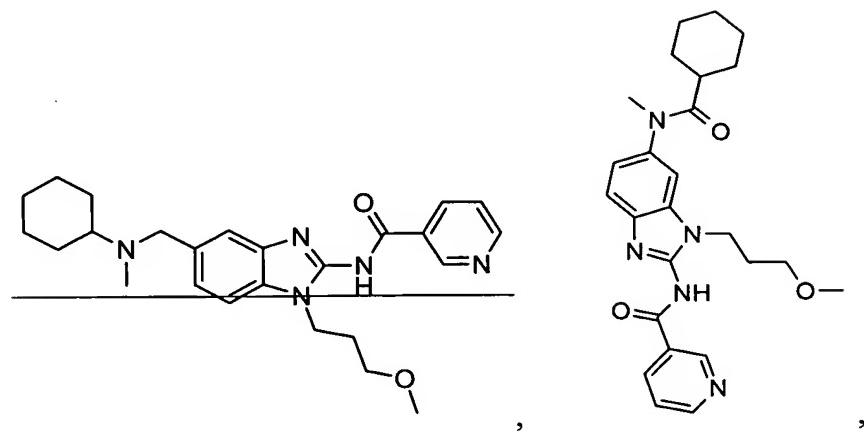
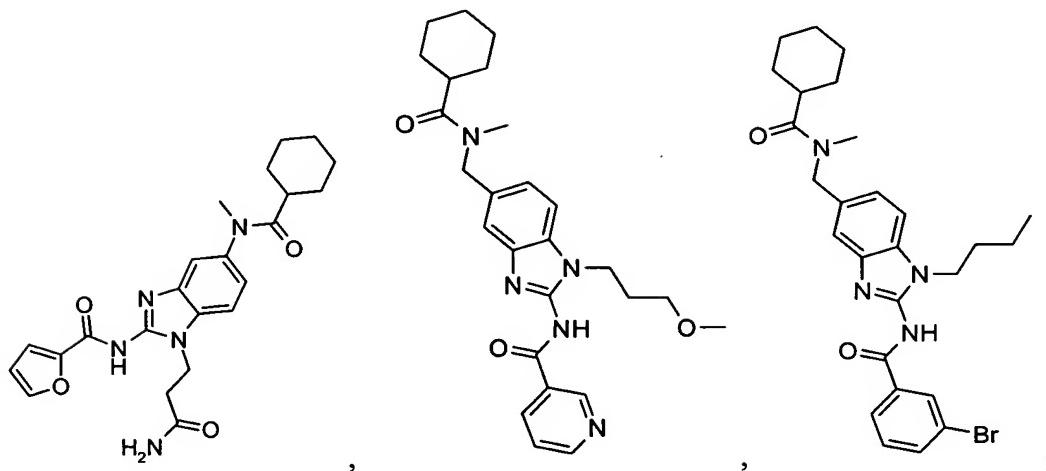
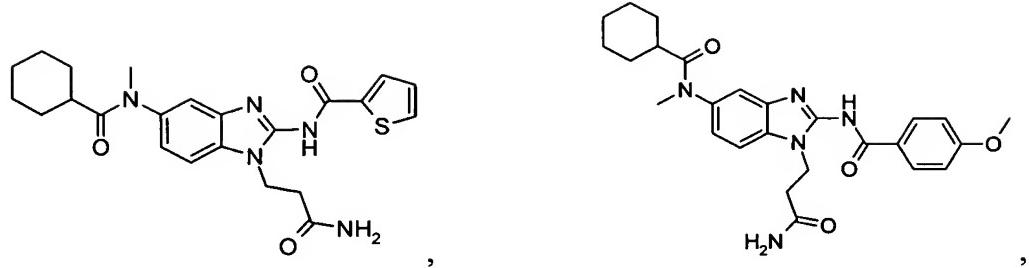


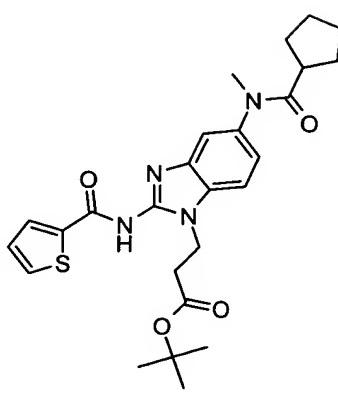
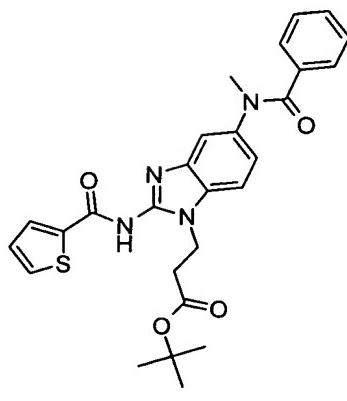
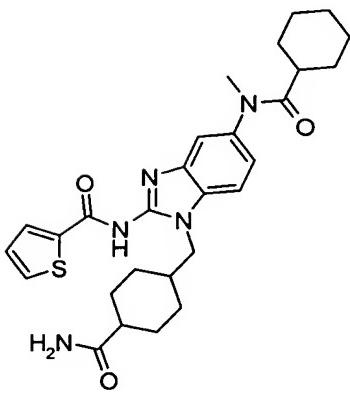
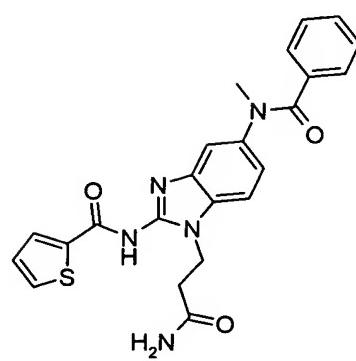
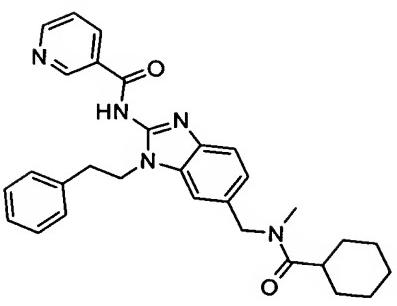
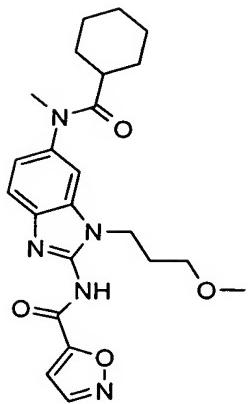


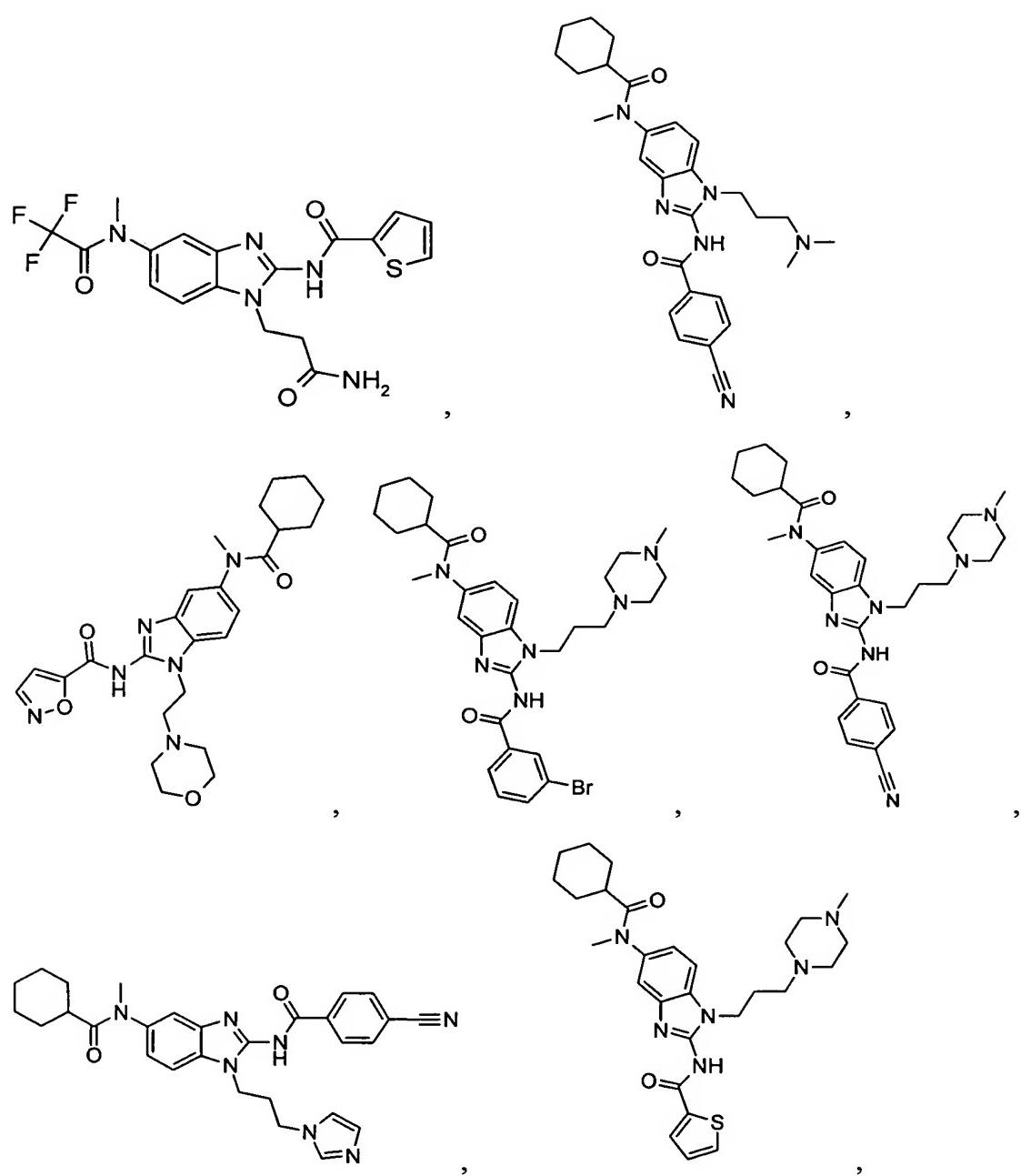


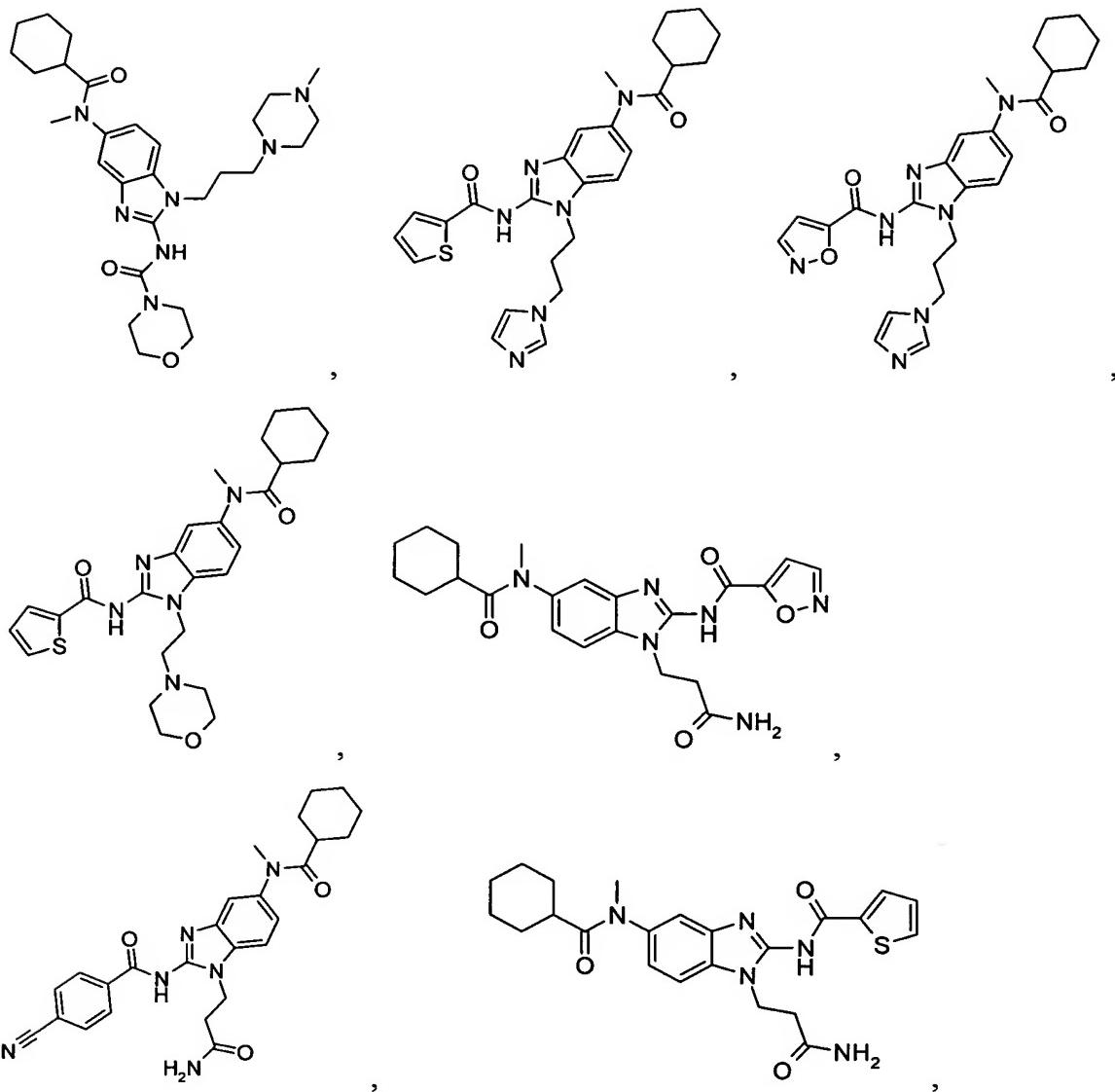
or the pharmaceutically acceptable salts thereof.

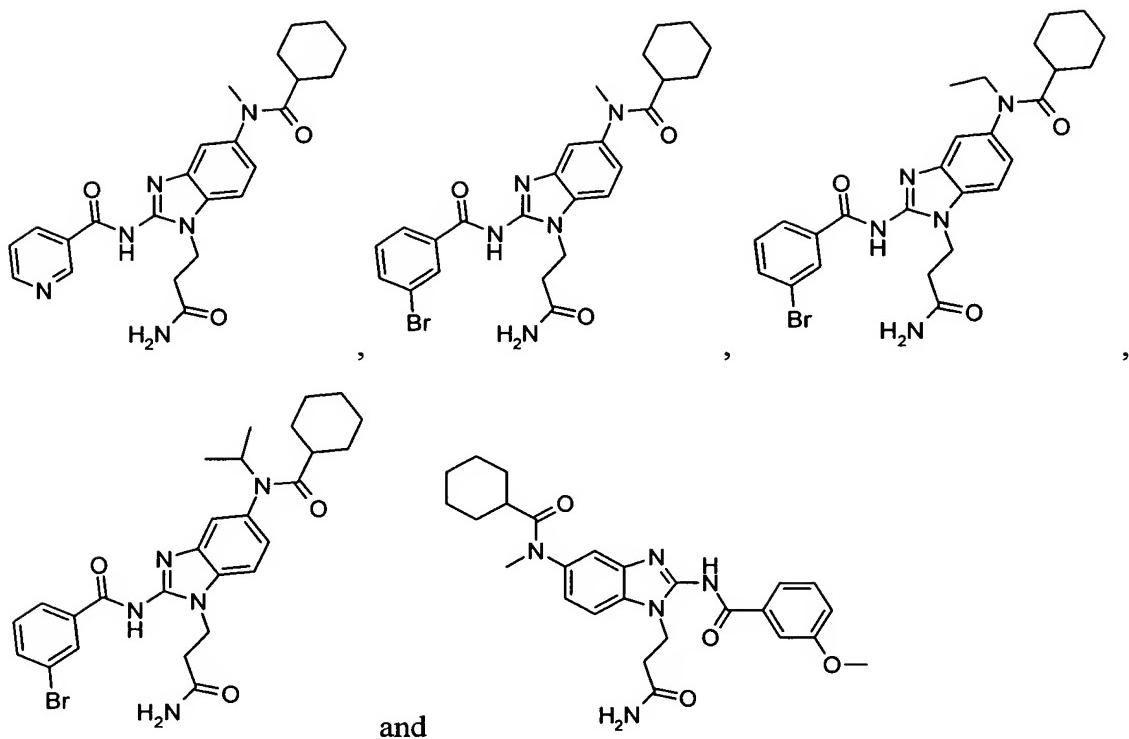
Claim 16 (currently amended): A compound chosen from:











or the pharmaceutically acceptable salts thereof.